

## PROJECT DATA SHEET



## **Project Description**

This project involved the design and construction of a process plant upgrade within an existing and operational ammonia production facility.

Rivelin Consultants Limited was appointed by the Client as the civil and structural engineer for the structural analysis, design and drawings of supports for approximately 250m of process piping and cable trays.

Key project criteria

- Design within a process plant environment
- Very tight space constraints to work within
- Stringent quality criteria dictated by Yara
- Specific earthquake, wind and process codes were adopted

## Our role

- Preparation of the full civil and structural design criteria for approval
- Planning and working with the Client in the development of the overall configuration and orientations
- Structural analysis of the supports including seismic and wind loading to IBC 2009 and ASCE07-05
- Structural design of major members such as stanchions, pipe support beams
- Multi-code design to ensure global conformance (British and American) Design Codes
- Structural analysis, design and modeling carried out using STAAD
- 3D modeling of supports and pipework interfaces
- Liaising with Client and Owner quality assurance team to resolve site issues



